REMARKS

Applicant wishes to thank Examiner Oullette for his helpful remarks during the telephone interview of April 27, 2007. In light of those remarks and what follows, applicant respectfully requests reconsideration and allowance of the subject application.

CLAIMS

The Office Action dated February 24, 2006 rejected claims 1-23 and 28-41. New arguments in support of patentability are provided by this response for claims 1-13, 17-21, 29-33, and 41. Claims 14-16, 22-28, and 34-40 have been canceled. Claims 1-13, 17-21, 29-33, and 41 are currently pending in the application.

35 U.S.C. § 102

In the Office Action dated February 24, 2006, claims 1-6, 12-14, 17-19,22-23, 28-31, 33-37, and 41 are rejected under 35 U.S.C. § 102(e), as being anticipated by Thiessen. (US Patent No. 5,495,412, hereinafter, "Thiessen.").

The Applicant respectfully disagrees with the characterization of Thiessen in the rejection under 35 U.S.C. § 102. The characterizing language in the Office Action mirrors the language of the Applicant's claims. While the Applicant agrees that there may be certain similarities between Thiessen and the claimed invention, the Applicant disagrees with many of the characterizations of Thiessen. To respond to the characterizations in the rejection on an element-by-element basis, the Applicant would have to describe in detail what Thiessen actually discloses for each recited characterized element of Thiessen, as compared to the claim language of the present disclosure that the Office Action virtually quoted to describe Thiessen. Considering the scope and length of Thiessen that has been characterized using Applicant's own claim language, responding to the characterizations of Thiessen on an element-by-element basis would require a lengthy response. The Applicant will focus on certain distinctions between Thiessen and the presently claimed invention.

The Applicant further emphasizes that the present rejection is under 35 U.S.C. § 102, and as such to overcome this rejection, the Applicant is only required to provide a

distinction between the claimed invention and Thiessen. The Applicant will provide several distinctions.

The preamble to claim 1, as amended, recites a method for using at least one computer to process contingent commitments relating to at least one business venture involving one or more agents. While there may or may not be structural similarities between a computer-mediated decision-making group in which multiple agents utilize contingent commitments and "a computer-based method and apparatus for assisting multiple parties involved in complex negotiations in reaching agreement that optimizes the individual and overall benefit to the parties" (Thiessen, C1, L9-13), they are simply not the same thing as required under the anticipation rejection of 35 U.S.C. § 102.

Thiessen uses linear programming techniques to arrive at a theoretically "optimal" solution. Thiessen presupposes that such a solution exists and that it can be determined in a practical amount of time by linear programming methods. However, it is known that there are many situations in which linear programming is not a suitable method. **As I explained during the Examiner Interview on April 27, 2007, linear programming is a mathematical programming technique whose goal is to maximize (or minimize) a real-valued function. It is a restricted kind of optimization which assumes that both the function and its associated domain (set of input values) may be specified in a linear fashion. For a more detailed explanation, see Wikipedia entry on "Optimization".**

The present invention uses "contingent commitments" to arrive at computer-mediated decisions. To determine what is meant by a contingent commitment, such as recited in the preamble and other portions of claim 1, one must consider pages 6 to 9 of the specification that describe the contingent commitment module. These pages describe a computer-mediated decision-making process. The present disclosure relates to business ventures between one or more agents. Furthermore, claim 1 includes the language, "wherein the contingent commitments include at least one modal operator or quantifier". The Applicant submits that there is no teaching in Thiessen to utilize contingent commitments, modal operators or quantifiers. The Office Action cites definitions of "modal" and "modal quantifier" that are related to the statistical concept of the mode of a distribution, but are not relevant to the present application. The present application does

not use the phrase "modal quantifier"; the relevant phrase from the application is "modal operator" and this phrase has a well-defined meaning in the field of mathematical logic. For example, Wikipedia defines a modal operator as "a logical connective, in the language of a modal logic, which forms propositions from propositions. In general, a modal operator is formally characterized by being non-truth-functional, and intuitively characterized by expressing a modal attitude (such as necessity, possibility, belief, or knowledge) towards the proposition which it is applied to." **As I explained during the Examiner Interview on April 27, 2007, modal operators, quantifiers, and contingent commitments work in an entirely different framework to that of linear programming. The present invention does not require assumptions about linearity of the function to be optimized. It does not even require that a solution be provably "optimal". Instead, it identifies solutions that are consistent with the contingent commitments of the users.**

A simple example illustrates some of the differences between Thiessen and the present invention. Thiessen relies on linear programming to identify a "ZOPA" (Zone of Possible Agreement). This ZOPA can be visualized by using a Venn diagram. A 3-party negotiation using Thiessen would seek to identify a region of the Venn diagram where the 3 parties share acceptable outcomes, and then determines the "best" outcome within that region. In contrast, the present invention does not look for a ZOPA, nor does it assume that a ZOPA exists or can be identified. The present invention seeks to identify solutions that satisfy the contingent commitments. These solutions may be widely dispersed single points within the solution space. For example, one solution may involve a modal operator specifying that condition C1 is a necessary condition, while an alternative solution may involve the use of a second modal operator specifying that C2 is a possible condition, i.e., does not preclude a solution. To reiterate, the present invention makes no assumptions about whether a ZOPA exists, whether optimization is practical, or whether optimization can be achieved via linear programming.

The Office Action further rejected claim 12 under 35 U.S.C. § 102 as being anticipated by Thiessen. The claim language of claim 12 contains similar, though not

identical, limitations as claim 1. Therefore, for at least the reasons as described above, the anticipation rejection to claim 12 of Thiessen should be withdrawn.

The Office Action rejected claim 13 under 35 U.S.C. § 102 as being anticipated by Thiessen. Thiessen uses the words "evaluation" and "estimate" in describing his method of multi-party, multi-issue negotiation. However, Thiessen does not in any way address the problem of measuring the value of a quantity, nor does Thiessen in any manner describe a method for reducing the error associated with such measurement. As noted above, the present rejection is under 35 U.S.C. § 102, and as such to overcome this rejection, the Applicant is only required to provide a distinction between the claimed invention and Thiessen. The Applicant submits, that, for at least the above reasons, the anticipation rejection of claim 13 should be withdrawn.

As I explained during the Examiner Interview on April 27, 2007, claim 13 provides a systematic process for reducing measurement error by creating a framework for multi-dimensional error cancellation. Such multi-dimensional error cancellation may include the use of multiple value assessors, multiple data sources, multiple valuation models, and/or multiple entities for whom the value is being assessed. Error reduction may be further facilitated by assigning "probability" weights to one or more of these dimensions, or through the addition of dimensions considered relevant to the measurement. The order in which dimensions are listed in the following example is arbitrary.

For example, in determining the value of an intangible asset, a four-dimensional error reduction may involve the use of pluralities of value assessors (first dimension), data sources (second dimension), valuation models (third dimension) and entities (fourth dimension). Four value assessors using three data sources and two valuation models to provide estimates to five entities would yield 120 separate value estimates (4x3x2x5). These estimates may be weighted equally or, alternatively, some estimates may be assigned greater weights than others.

Claims 20 and 21 depend from claim 13, and thereby include the limitations of claim 13. For at least that reason, the Applicant submits that the Thiessen rejection under 35 U.S.C. § 102 to claims 20 and 21 should be withdrawn.

14

35 U.S.C. § 103

In the Office Action dated February 24, 2006, claims 8, 10,11, and 32 are rejected under 35 U.S.C. § 103, as being anticipated by Thiessen.

The Applicant respectfully disagrees with the characterization of Thiessen in the rejection under 35 U.S.C. § 103. The characterizing language in the Office Action largely mirrors the language of the Applicant's claims. While the Applicant agrees that there may be certain similarities between Thiessen and the claimed invention, the Applicant disagrees with, and does not accept, many of the characterizations of Thiessen. To respond on an element-by-element basis to the characterizations in the rejection, the Applicant would have to describe in detail what Thiessen actually discloses for each recited characterized element of Thiessen, as compared to the claim language of the present disclosure that the Office Action virtually quoted to describe Thiessen.

Considering the scope and length of Thiessen that has been characterized using Applicant's own claim language, responding to the characterizations of Thiessen on an element-by-element basis would require a lengthy response. Instead, the Applicant will focus on certain distinctions between Thiessen and the presently claimed invention.

Thiessen discloses a computer-based method and apparatus for interactive computer-assisted negotiations. Applicant contends that Thiessen does not suggest negotiating a value of a contingent commitment, wherein the contingent commitments include at least one modal operator or quantifier, as claimed herein.

The Applicant thereby submits that claims 7-11, and 32, that depend from claim 1, are allowable over Thiessen for the same reason as described above with respect to the 35 U.S.C. 102 rejection.

Applicant agrees with the Office Action that Thiessen fails to show many claimed features (see, e.g., paragraphs 37, 40, 43, 46, 49, 52, 55, 58, 61, and 64). The Applicant does not agree, however, (in the respective paragraphs that follow these paragraphs), that these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited since the claims have been previously amended to make the claims comply with method claim terminology, and as such the claims are indeed functional.

CONCLUSION

In view of the forgoing remarks, Applicant respectfully requests reconsideration and allowance of the subject matter application including claims 1-13, 17-21, 29-33, and 41.

Respectfully Submitted,

May 14, 2007
(Date)

Marc M. Groz
(Inventor)
1450 Washington Blvd., Apt. S-1602
Stamford, CT, 06902
(917) 757-7024